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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,586	12/03/2003	Pil-Ho Yu	1349.1337	3450

21171 7590 05/29/2008
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EXAMINER	
LEE, JOHN W	

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
05/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/725,586	YU, PIL-HO	
	Examiner	Art Unit	
	JOHN Wahnkyo LEE	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *11-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

REPLY TO AMENDMENT AFTER FINAL

IMPROPER OFFICE ACTION AND ADVISORY ACTION

The examiner acknowledged the applicant's argument. A new Office action is provided as Final without new ground rejection and re-setting of the response due date.

FAILURE TO ADDRES APPLICANT TRAVERSALS

The applicant argues that the examiner did not answer or address all the traversals. However, the examiner does not agree with the applicant. The examiner had responded to all the main arguments of the applicant.

RELIANCE ON KSR AND REQUIRED EVIDENCE IN RECORD

The applicant argues that there are no such supporting rationales to combine the prior arts using Supreme Court of *KSR v. Teleflex (KSR v. Teleflex*, 550 U.S. ___ (2007)). According to the rulings of the Supreme Court of *KSR v. Teleflex (KSR v. Teleflex*, 550 U.S. ___ (2007)) that teaches that the so called teaching, suggesting and motivation test (TSM) is one of a number of valid rationales which could be used to determine obviousness, but not the only rationale that may be relied upon to support a conclusion of obviousness. The examiner stated in the previous advisor action that the Suzuki's invention and Wittig's invention can be combined in De Hann's invention to provide a more reliable method and apparatus for noise measurement (De Hann (col. 1, lines 49-50) which is a simple substitution of one known element for another to obtain predictable results or is using known technique to improve similar devices (methods or

products) in the same way. So, the examiner argues that the combination can be valid according to the rulings of the Supreme Court of *KSR v. Teleflex (KSR v. Teleflex*, 550 U.S. ___ (2007)) that teaches that the so called teaching, suggesting and motivation test (TSM) is one of a number of valid rationales which could be used to determine obviousness, but not the only rationale that may be relied upon to support a conclusion of obviousness. It is not necessary the motivation or rationale have to be supported by evidence in the record. Since Suzuki, Witting and De Hann's invention is all related with image signals using blocks, "a simple substitution of one known element for another to obtain predictable results or is using known technique to improve similar devices (methods or products) in the same way" can be the rationale to support a conclusion of obviousness based on MPEP 2143, which discloses the exemplary rationales.

IMPROPER REJECTION RATIONAL OF CLAIMS 3-5 AND 8-10

A new Office action will be provided. The applicant should refer the new office action, which is sent out as final.

RESTRICTION/ELECTION REQUIREMENT

The examiner reviewed the applicant's response to election/restriction filed on 12 June 2007, but there was not even an implication that the applicant elected species I with traverse. The applicant just argued that the examiner restriction was not improper. However, merely arguing whether the examiner's restriction being proper or not does not mean that the applicant elected one species with traverse. Examiner strongly states

that the restriction and the decision, considering the applicant elected species I without traverse, was proper and right. For further detail explanation regarding of restriction, refer the previous office action sent out.

DETAILED ACTION

This office action is in response to applicant's argument filed on 10 April 2008 that the final rejection is defective, and it replaces the office action mailed on 10 January 2008. It restarts the statutory time period.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Hann et al. (US 5,657,401) in view of Suzuki et al. (US 6,118,552), and further in view of Wittig (US 2004/0066468).

Regarding claim 1, De Hann discloses an apparatus for measuring noise (abstract; Fig. 1 and Fig. 3), comprising: a delay separately delaying the pictures of the input image signal by one period (Fig. 2-11 and Fig. 4-11; col. 3, line 23, "... delay ..."); an SAD calculator calculating an absolute difference between a present picture and an

a picture of the image signal delayed by the delay (abstract; Figs. 1 and 3, "SAD"). However, De Hann does not disclose all the claim limitation of claim 1. Instead of De Hann, Suziki discloses average luminance value (claim 9, "average luminance component data value") a block average calculator dividing individual pictures of an input image signal into blocks and calculating average luminance values for a plurality of the divided blocks (Figs. 1-30, "block division component" and 1-32, "average data value calculations component"; abstract; claim 9); Wittig discloses a picture noise selector (Fig 1-16, "noise estimate block"; paragraph [0014]) selecting a desired number-th arranged absolute difference (paragraphs [0014]-[0015]), of a plurality of calculations from the SAD calculator (Fig. 1-10, "SAD"; paragraph [0012]) for the input image signal (paragraph [0012]), as a picture noise when absolute differences calculated by the SAD calculator are arranged (paragraphs [0014]-[0017], "counters"), in turn, from a smallest value toward a largest value (paragraphs [0014]-[0017], "SAD value range").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Suzuki's invention and Wittig's invention in De Hann's invention to provide a more reliable method and apparatus for noise measurement (De Hann (col. 1, lines 49-50) which is a simple substitution of one known element for another to obtain predictable results or is using known technique to improve similar devices (methods or products) in the same way.

Regarding claim 2, De Hann further discloses a comparator comparing whether the average luminance value calculated by the block average calculator is

within a desired range, wherein the SAD calculator calculates the absolute difference upon the comparator determining that the average luminance value is within the desired range (Figs 1-7 and 4-7, "comparator"; abstract; col. 3, lines 4-16 and 50-67; col. 4, lines 1-13; claims 1 and 9).

Regarding claim 3, Wittig further discloses comprising a regional noise selector selecting a desired arranged number-th picture noise as a regional noise from selected picture noises (Fig 1-16, "noise estimate block"; paragraph [0014]) selected by the picture noise selector (Fig 1-16, "noise estimate block"; paragraph [0014]) from pictures of the image signal in a desired region arranged, in turn, from a smallest selected picture noise toward a largest selected picture noise (Fig. 1-14 and 1-16; paragraph [0013]-[0014]; claims 1-2 and 7-8).

Regarding claim 4, Wittig further discloses that the picture noise selector selects a second absolute difference as the picture noise (Fig. 1-14 and 1-16; paragraph [0013]-[0014]; claims 1-2 and 7-8). Based on the disclosure that selecting one of the noise estimate value from the noise estimate selector block, it is inherent and readily apparent that the noise can be any values from the counters such as the second one.

Regarding claim 5, Wittig further discloses that the regional noise selector selects a second picture noise as the regional noise (Fig. 1-14 and 1-16; paragraph [0013]-[0014]; claims 1-2 and 7-8). Based on the disclosure that selecting one of the noise estimate value from the noise estimate selector block, it is inherent and readily apparent that the noise can be any values from the counters such as the second one.

Regarding claim 6, claim 6 is analogous and corresponds to claim 1. See rejection of claim 1 for further explanation.

Regarding claim 7, claim 7 is analogous and corresponds to claim 2. See rejection of claim 2 for further explanation.

Regarding claim 8, claim 8 is analogous and corresponds to claim 3. See rejection of claim 3 for further explanation.

Regarding claim 9, claim 9 is analogous and corresponds to claim 4. See rejection of claim 4 for further explanation.

Regarding claim 10, claim 10 is analogous and corresponds to claim 5. See rejection of claim 5 for further explanation.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN Wahnkyo LEE whose telephone number is (571)272-9554. The examiner can normally be reached on Monday - Friday (Alt.) 7:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW C. BELLA can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew C Bella/
Supervisory Patent Examiner, Art Unit 2624

/J. W. L./

Examiner, Art Unit 2624